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| 10/787,235 | 02/27/2004 | Hiroshi Nishikawa | 325772034600 | 4822 |

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| EXAMINER | |
|---|---|
| ZHU, RICHARD Z | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/787,235 | NISHIKAWA ET AL. | |
| | Examiner | Art Unit | |
| | Richard Z. Zhu | 2625 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 27 February 2004 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/27/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on applications JP 2003-045479 filed in Japanese Patent Office on February 24th 2003. Certified copies of said Japanese Application had been received.

### *Drawing Objections - 37 CFR 1.83*

2. It appears to the examiner that the disclosure in Fig 3 and Paragraphs 32-33 on Page 6 that the applicant is comparing the embodiment of present invention with a conventional set up, one which the applicant characterized as "conventional rectangular spacer 51".

As such, Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C 112 that form the basis for the rejections under this section made in this office action:

> [2nd Paragraph] The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-8 are rejected under 35 USC 112 2nd Paragraph as failing to particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-8 recites claimed subject matters using a relative term "approximately"; such relative term does not recite a definitive limitation. For example, "thickness of said upper surface member is approximately 0.4mm" can be interpreted in such a way that an upper surface member of 0.4mm, 0.5mm, or any upper surface member thickness of a working spacer can read on the claim. As such, the ranges cited in Claims 5-8 are not definite.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 11 are rejected under 35 USC 102(b) as being anticipated by ***Takuya (JP 2001-223832 A)***.

**Regarding Claim 1,** ***Takuya*** discloses an image reading apparatus, comprising:

a reading transparent member (**Fig 1, translucent reading criteria member 2 and see paragraph 11**);

a reading unit that reads through said reading transparent member an image on an original document that is being conveyed over an original document reading position of said reading transparent member (**Fig 1, reading station P and read means 3, and see paragraph 11 where a manuscript M is being conveyed over reading station P**); and

a spacer that is mounted on said reading transparent member on a surface thereof opposite the side thereof at which said reading unit is disposed and at a position upstream from the original document reading position relative to an original document conveyance direction (**Fig 1, level difference formation member 4 and capture member 5 are**

**mounted on translucent reading criteria member 2 and opposite the side thereof. Reading Station P is disposed at a position upstream from an original document reading position relative to an original document conveyance direction and see Paragraph 15, "manuscript M conveyed in the upstream of the reading station P")**,

wherein the spacer is configured such that height of a downstream end thereof relative to the original document conveyance direction decreases toward the downstream direction (**Fig 1, level difference formation member 4 and capture member 5 are configured such that height of a downstream end thereof relative to the original document conveyance direction decreases toward the downstream direction**).

**Regarding Claim 2,** ***Takuya*** discloses wherein said spacer is configured such that the downstream end thereof comprises a downward-sloping surface whereby the height thereof decreases toward the downstream direction (**Fig 1, level difference formation member 4 and capture member 5 with featured downward sloping surface and height decreases toward the downstream direction**).

**Regarding Claim 3,** ***Takuya*** discloses wherein the downstream end of said spacer has a stair-step configuration, and that the height of the steps decreases toward the downstream direction (**Fig 1, level difference formation member 4 and capture member 5**).

**Regarding Claim 4,** ***Takuya*** discloses wherein said spacer comprises a lower surface member that comes into contact with said reading transparent member (**Fig 2-3 and see Paragraph 29, level difference formation member 61 is in contact with glass platen 31**) and an upper surface member that comes into contact with the original document during

conveyance of the original document (**Fig 3, Manuscript M**) wherein such members are glued together to form a step configuration (**Paragraph 29, level difference member 61 is stuck on glass platen 31 and see paragraph 16-17, capture member 5 is attachable from level difference member 4 and 61 to form a step configuration**), and said upper surface member is made of a material having both a lower friction coefficient and superior wear-resistance than a material of said lower surface member (**Paragraph 29, level difference member 61 composed of materials having low coefficient of friction allowing the conveyance of manuscript M. This material is unnecessary on the lower surface because the primary purpose of the lower surface is to get stuck on the glass platen 31. As such, upper surface has superior wear-resistance than lower surface**).

**Regarding Claim 5,** ***Takuya*** discloses wherein thickness of said upper surface member is approximately 0.4 mm, while thickness of said lower surface member is approximately 0.25 mm (**Fig 1, level difference formation member 4 and capture member 5. The reference spacer thickness reads on the claim due to indefiniteness of the range**).

**Regarding Claim 6,** ***Takuya*** discloses wherein a downstream end of said lower surface member relative to the original document conveyance direction protrudes from beyond that of said upper surface member by approximately 1 mm in the downstream direction (**Fig 1, the width of capture member 5. The reference spacer thickness reads on the claim due to indefiniteness of the range**).

**Regarding Claim 7,** ***Takuya*** discloses wherein said reading position is placed at a position approximately 3 mm from the downstream end of said lower surface member toward

the downstream direction (**Fig 1, distance between translucent reading criteria member 2 and capture member 5**).

**Regarding Claim 8,** ***Takuya*** discloses wherein the interval between said reading transparent member and an original document conveyance path is approximately 0.2 mm at said original document reading position (**Fig 1, the interval between manuscript M and translucent reading criteria member 2**).

**Regarding Claim 9,** ***Takuya*** discloses wherein said upper surface member is formed by a film made of high-polymer polyethylene, while said lower surface member is formed by a film made of polyester (**Paragraph 29, composition of level difference formation member comprises polyethylene, which is a species of genus polyester family of synthetic fibers**).

**Regarding Claim 10,** ***Takuya*** discloses wherein said upper surface member is formed by a film made of fluorine resin, while said lower surface member is formed by a film made of polyester (**Paragraph 29, composition of level difference formation member comprises polyethylene, fluorine resin "fluororesin, resin made of fluorine and carbon", which is a species of genus polyester family of synthetic fibers**).

**Regarding Claim 11,** ***Takuya*** discloses a spacer (**Fig 1, level difference formation member 4**) to be used for an image reading apparatus which has a reading transparent member (**Fig 1, translucent reading criteria member 2**) and a reading unit (**Fig 1, reading station P and read means 3**) that reads through said reading transparent member an image of an original document that is being conveyed over an original document reading position of said reading transparent member (**Paragraph 11**),

wherein said spacer is mounted on said reading transparent member on a surface thereof opposite the side thereof at which said reading unit is disposed and at a position upstream from the original document reading position relative to an original document conveyance direction (**Fig 1, level difference formation member 4 is mounted on translucent reading criteria member 2 and opposite the side thereof. Reading Station P is disposed at a position upstream from an original document reading position relative to an original document conveyance direction and see Paragraph 15, "manuscript M conveyed in the upstream of the reading station P"**),

wherein said spacer is configured such that height of a downstream end thereof relative to the original document conveyance direction decreases toward the downstream direction (**Fig 1, level difference formation member 4 is configured such that height of a downstream end thereof relative to the original document conveyance direction decreases toward the downstream direction**).

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 5366581 A and JP 06-030184 discloses an inclined spacer.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner's supervisor King Y. Poon whose telephone number is 571-272-7440 or examiner Richard Z. Zhu whose telephone number is 571-270-1587. Examiner Richard Zhu can normally be reached on Monday and Wednesday, 6:00 - 3:30, Tuesday and Thursday, 7:30-5:00, and alternate Friday, 7:30-4:00.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZ$^2$
10/17/2007

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SUPERVISORY PATENT EXAMINER

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